should have received universal accord to make Cockayne's intervention unnecessary. However, Cockayne (1953. *Ent. Rec.* **65**: 193) commenting on the continued use in Britain of the name *rebeli* intervened to add legitimacy to Adkin's inaccurate description by allocating one of Adkin's series known to have been exhibited, as a lectotype, a male specimen from Dartford, 12 August 1908. A curious result of the confusion of nomenclature occurs in Seitz in which a figure of *nigra* is labelled *rebeli*, but its accompanying description is based on *nigra*. French textbooks not surprisingly refer to these melanics with their yellowish striae as *nigerrima* Moreau, which I favour, but I consider Adkin's *nigra* is now acceptable, being used by the British Museum (Natural History), presumably as the name predates that of Moreau.

Although Cockayne's intervention may have added some legitimacy to Adkin's *nigra*, the extreme melanics he exhibited in 1908 still remain without adequate description and in fact were somewhat variable. Such variability has been studied and divided into several sub-varieties by Lenek (1951. *Ent. Nachr. blatt* **3**:122). Uniformly black specimens, devoid of markings, are named ab. *orcus* Lenek. Chalmers-Hunt (*op. cit.*) notes several bred specimens from Dartford in 1912, 1913 and 1914 in the National (RCK) Collection. However, despite carefully examining all extreme melanics visiting my garden mv light, only one ab. *orcus* has been identified (13 June 2005), suggesting it is quite rare here. This specimen would appear to be the first wild ab. *orcus* to be recorded for Kent.

Extreme melanic forms of this species in north-west Kent have now declined from 25% for the five years 1981-1985, then already being in decline, to 3.5% for the period 2001-2005, being as low as 1.8% in 2005 (n = 160). However, ab. *perfumaria* remains the prevailing form, and typical *rhomboidaria* remain of casual occurrence.— B. K. West, 56 Briar Road, Dartford, Kent DA5 2HN.

Progress in the study of the ecology and management of the Marsh Moth *Athetis pallustris* (Hbn.) (Lep.: Noctuidae) by monitoring of larvae

On 25 September 2005, forty final instar caterpillars of the Marsh Moth *Athetis pallustris* were found at the Saltfleetby-Theddlethorpe Dunes NNR on the Lincolnshire coast. Monitoring of larval populations has taken place here almost annually since 1989, using a technique of making small piles, about one-metre in diameter at the base, of cut grass and any herbage, in the places where the adult moths have been recorded in light-traps. The piles are left on site for two to four weeks and then sifted for larvae over a wire-mesh riddle and white sheet. This is an old technique first found to be successful for the Marsh Moth by Edelsten *et al.* (*Entomologist* **77**: 49-50 & 65-72). Since the early 1990s, monitoring has revealed a major decline in the numbers of larvae found in the litter-piles in the traditional area known for the moth, from as many as 108 in a single visit on 23 September 1989 and about 80 on 29 September 1990, with an average of almost two larvae per litter-pile in 1990, to only one or two larvae per session since 2000, and in some years none seen at all. This has been of great concern because apart from occasional individuals

of a small surviving population at Gibraltar Point, further south on the Lincolnshire coast, the Saltfleetby NNR is the only place in Britain on which the Marsh Moth is now being found. There has been much speculation as to the factors responsible for the decline. Possible causes for consideration have included gradual changes in the climate of the region, changes in the hydrology of the site as a result of recent improvements to the drainage system, natural cycles of abundance as a result of predation and/or parasitism and the intensification of hay-cutting and aftermath grazing management. Another worry has been that variation in the size, construction and composition of the litter-piles, the dates of construction and the sifting and the length of time the piles are left in place, might have thrown the results because these have not been absolutely consistent with the early years. The break-through discovery of a large population of larvae on another part of the reserve, with caterpillars occurring in 2005 in the same numbers seen in the traditional areas in 1989 and 1990, reveals that the problem must be principally related to site management. The forty larvae were produced from 24 litter piles, an average of almost two larvae per pile, while none was found in 22 similar piles constructed and sampled at the same dates in the traditional area (litter-pile construction was during the third week of August). The area where larvae remain numerous is not cut for hay but it is lightly grazed by cattle. There is also some grazing by the local rabbit population, which is quite high, with several obvious burrows in the area occupied by the moths and pellets of rabbit dung were frequent when sifting the piles. The litter-piles constructed in this area for this project were made from material cut in the traditional area and the material is dispersed over the sward afterwards. On the visit on 25 September there was a large stack of hay which had been removed from the traditional area and stacked in the corner, but the aftermath had not yet been subjected to grazing by livestock. Sheep were planned to graze the area quite late in the year, up to Christmas. Cutting for hay has become annual and has covered most, but not all, of this field in recent years, but there is no grazing of the adjacent sandbanks. The sward at half of the litter pile sites in the traditional area was not cut in 2005 but no difference was seen in the numbers of larvae in these piles – they were missing from all. One explanation might be that the Marsh Moth population is slow to respond and may require several years to colonise habitat after cessation of cutting. Another possible reason is that a more general factor is continuing to affect the whole field, such as a grazing or drainage issue. More detailed accounts of this break-through discovery, including the sward heights and composition of the swards, have been prepared for Butterfly Conservation and English Nature. This example adds to existing concerns that annual hay-cutting over the entire area occupied by localised invertebrate populations can have catastrophic affects, which are probably intensified by aftermath grazing.

I thank John Walker, Assistant Site Manager for English Nature, for his continuing help and interest in managing areas of the Saltfleetby-Theddlethorpe Dunes NNR to favour the Marsh Moth, and for constructing the litter-piles. Some more parts of the traditional site are now not being cut annually, so that the effects on the Marsh Moth can be studied further. I would also like to thank and acknowledge all those who havebeen involved in the litter-pile sampling and other monitoring of the Marsh

Moth on this site over the years, and in particular Bernard Skinner, Colin Pratt and Gerry Haggett. This above work was undertaken by the author, funded by Butterfly Conservation's "Action for Threatened Moths Project" which receives contributory funding from English Nature. I also thank Writtle College for support in writing up the results for publication. Readers are respectfully reminded that permission from English Nature is necessary for all sampling and other interference with insects on National Nature Reserves in England and that the above work is part of an on-going study.— PAUL WARING, Reader, Centre of Environment & Rural Affairs, Writtle College, Essex. Address for correspondence: Windmill View, 1366 Lincoln Road, Werrington, Peterborough, PE4 6LS.

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Scottish Natural Heritage has recently carried out a review of the natural heritage of the Cairngorms as part of their draft State of the Park report. Therefore this seems an appropriate time to try to produce the most up to date and accurate summary of the lepidoptera within the Cairngorms NNR and in the National Park as a whole. I would be interested in hearing from any of your readers who can supply new or interesting records from the area and in particularly for the years since 2000, when I left the region. Even better of course would be if some of your readers decided to make 2006 the year that they really did 'do' the Cairngorms as a whole and not just the well known areas such as Abernethy, Craigellachie and Loch an Eilein and Rothiemurchus. Records would be specially welcome from the Creag Fhiaclach/ Coire Follais tree line, the highest natural tree line in Britain and from anywhere deep into the Park. There are very few records from the vast areas lying south of Carn Ban Mor, Cairn Toul and Ben Avon and around the headwaters of the rivers Feshie and Eidart and the Geldie Burn. Indeed almost anywhere will produce something interesting and probably new to the Park. All that is needed is a strong pair of boots and limitless energy – and some good waterproofs.

Inevitably the majority of past records have come from the summer months so records for early or late year from any areas of the Park will be especially valuable. Over most of the Park there is free access all year round but I would be pleased to help if anyone would like clarification for any particular estates.

The main published records are listed below. I can supply on request by e-mail all the records I hold in either Word or Excel format. All records will be gratefully acknowledged and passed on to SNH.

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– EUAN A M MACALPINE, Auchenshore, Auchencairn, Castle Douglas, DG7 1QZ (E-mail: js.auchen@virgin.net).